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(54) **AUTOMATED ABDOMINOJUGULAR
REFLUX TESTING**

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ABSTRACT

This document describes automated abdominojugular reflux (AJR) testing. To automate AJR tests, a pressure cuff wrapped around a person's abdomen applies pressure while video of their neck is captured. By way of example, a medical professional wraps a pressure cuff around the person's abdomen and records video of the person's neck using a smartphone, which communicates with the pressure cuff to synchronize the application of pressure with video capture. The video is processed to detect and track the response of jugular venous pulse (JVP), which is compared to AJR test thresholds to determine test results. While determining JVP, and thereby results of AJR tests, from reconstructed videos may not result in data that is as accurate as invasive intra-heart tests, it requires little if any risk to patients and is easy for medical professionals to perform. Further, these techniques enable AJR tests to be performed automatically and without relying on estimates made by skilled medical professionals.

